

AMENDMENTS TO THE CLAIMS

1. (Previously presented) A method of determining the presence or absence of a target microorganism in a sample to be tested, said method comprising:
 - (a) combining with said sample, an amount of parent bacteriophage capable of infecting said target microorganism to create a bacteriophage exposed sample, said amount of parent bacteriophage being less than the threshold amount of bacteriophage capable of being detected in said bacteriophage exposed sample;
 - (b) providing conditions to said bacteriophage exposed sample sufficient to allow said bacteriophage to infect said target microorganism and to multiply in said target microorganism to create a detectable amount of progeny bacteriophage or a biological substance associated with progeny bacteriophage in said bacteriophage exposed sample; and
 - (c) assaying said bacteriophage exposed sample to detect the presence or absence of said progeny bacteriophage or said biological substance associated with progeny bacteriophage to determine the presence or absence of said target microorganism.
2. (Previously presented) A method as in claim 1 wherein said microorganism is a bacterium and said assaying comprises detecting said progeny bacteriophage or a biological substance associated with progeny bacteriophage as an indication of the presence of said target bacterium in said sample.
3. (Original) A method as in claim 2 wherein said providing comprises providing conditions sufficient to cause said bacteriophage to multiply sufficiently to burst said target bacterium.
- Claims 4 – 9 (Canceled)
10. (Withdrawn) A method as in claim 1 wherein said assaying comprises utilizing a mass spectrometer.

11. (Withdrawn) A method as in claim 10 wherein said utilizing comprises utilizing a MALDI mass spectrometer.

12. (Withdrawn) A method as in claim 10 wherein said utilizing comprises preparing a spectrometer sample using magnetic beads.

13. (Withdrawn) A method as in claim 1 wherein said assaying comprises exposing said sample to a laser beam.

14. (Original) A method as in claim 1 wherein said providing comprises lysing said microorganism prior to said assaying.

15. (Original) A method as in claim 14 wherein said lysing comprises permitting said bacteriophage to burst said microorganism.

Claims 16 – 20 (Canceled)

21. (Currently amended) A method as in claim 1 wherein said providing comprises dissociating bacteriophage in said bacteriophage exposed sample.

22. (Original) A method as in claim 21 wherein said dissociating comprises adding a dissociating agent to said bacteriophage exposed sample.

23. (Original) A method as in claim 22 wherein said adding a dissociating agent comprises adding a substance selected from the group consisting of: acid, urea, denaturing agents, and enzymes.

Claims 24 – 114 (Canceled)